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# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

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3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203  
801-538-5340

November 18, 1992

Mr. Norman Haslem  
Ziegler Chemical & Mineral Corp.  
Star Route  
Vernal, Utah 84078

Dear Mr. Haslem:

Re: Reclamation Surety, Ziegler Chemical & Mineral Corporation, Ziegler Gilsonite Mines, M/047/013, Uintah County, Utah

According to Division records, the current Ziegler surety will expire on January 1, 1993. It is the Division's desire that a revised surety be in place at that time. The revised surety will need to be presented to the Board of Oil, Gas and Mining at their monthly briefing for approval. In order to present this matter at the next briefing session, tentatively scheduled for January 27, 1993, the surety, attachments, and Reclamation Contract would need to be received by the Division in a final form by January 8, 1992.

The Division has prepared a draft Reclamation Surety Estimate (copy enclosed) for the Ziegler Gilsonite operations. This revised and updated estimate was based on figures used in the 1987 estimate. Reclamation costs for those mine sites which are currently bonded with State Lands & Forestry were omitted from the final surety estimate total in order to eliminate any double bonding. This estimate contains several assumptions regarding the various mine sites which will need to be verified by Ziegler. Please review this estimate and the descriptions of the assumptions listed below. After the surety estimate is agreed upon, we can begin finalizing the Reclamation Contract and Surety form.

The Little Bonanza #1 site was omitted from the surety estimate because it was assumed that this site has been reclaimed. During the last site inspection, it was mentioned that Little Bonanza #1 would be inactive, but Little Bonanza #8 would become active. The hours/acres estimated for reclamation of the Little Bonanza #8 site were assumed. The Division has also assumed the Little Bonanza #1 site has been regraded and reseeded and the Little Bonanza #8 site has not yet been disturbed. The Division may need to include seeding of the Little Bonanza #1 site in this estimate. Please clarify the status of these two sites and comment on the assumptions used if appropriate.

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Norman Haslem  
Ziegler Gilsonite Mines  
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The Little Emma #7 site was included in the 1987 estimate. During the last site inspection, it was mentioned that Little Emma #7 was to be reclaimed this fall (1992), and the Little Emma #1 (middle) is being reactivated. Please comment on the status of these two sites and the values used in the Little Emma section of this estimate.

The 1987 estimate included the Cottonwood #1 & #2 as separate sites. According to State Lands & Forestry, one bond is currently in place for both Cottonwood sites. Our latest estimate assumes both sites are combined into one with a disturbed area of 1.24 acres. Please verify or comment on this assumption.

The Cottonwood #3 site is currently bonded with State Lands as a 1.5 acre site. This site was included in this estimate because it may be developed within the five year bonding period. Please comment on the hour values used in the Cottonwood #3 section of the estimate.

The Little Bonanza #8A site is included in this estimate but, it was not included in the original 1987 estimate. The hours associated with reclaiming this site were assumed for this estimate. Please verify or comment on these assumptions.

Please provide a written response to this letter at your earliest convenience. In addition, please provide the updated summary listing of the mine sites, as requested in our June 30, 1992 letter. Thank you for your cooperation in the completion of this permitting action. If you have any questions regarding this letter please contact me or Wayne Hedberg.

Sincerely,



Anthony A. Gallegos  
Reclamation Engineer

jb  
Enclosure  
cc: Gayle McKeachnie, McKeachnie & Allred  
Lowell Braxton, DOGM  
M047013

Prepared by Utah Division of Oil, Gas & Mining

- This estimate is based on Hrs and/or acres from the 1987 surety estimate
- This estimate is based on third party costs
- The 1987 surety estimate was based on using Ziegler's equip
- Need to verify assumptions for: LB-1, LB-8, LE-1?, C-1&2?, C-3, LB-8A

INDEPENDENT 3	1.38	acre		
<u>Structural Removal</u>		HRS>acre	\$/HR>acr	\$
30 ton crane, oper. & oiler		4	148.24	593
4 laborers		16	111.44	1,783
<u>Earthwork &amp; Grading</u>				
front end loader & operator		2	73.10	146
motor grader & operator		2	85.44	171
dump truck & operator		2	75.61	151
<u>Capping</u>				
concrete (in CY)		4	63.00	252
one laborer		4	27.86	111
forms, etc. (SUM)		1	50.00	50
<u>Revegetation</u>				
tractor + disc/drill + operator	>	1.38	160.00	221
seed @ \$140/acre,	>	1.38	140.00	193
fertilizer @ 200 lb/acre	>	1.38	100.00	138
TOTAL				3,810
Avg. cost per acre			\$2,761	

INDEPENDENT 4	1.41	acre		
<u>Structural Removal</u>		HRS>acre	\$/HR>acr	\$
30 ton crane, oper. & oiler		4	148.24	593
4 laborers		16	111.44	1,783
<u>Earthwork &amp; Grading</u>				
front end loader & operator		2	73.10	146
motor grader & operator		2	85.44	171
dump truck & operator		2	75.61	151
<u>Capping</u>				
concrete (in CY)		4	63.00	252
one laborer		4	27.86	111
forms, etc. (SUM)		1	50.00	50

LEAD

M/047/013

2/7

Revegetation

tractor + disc/drill + operator	>	1.41	160.00	226
seed @ \$140/acre	>	1.41	140.00	197
fertilizer @ 200 lb/acre	>	1.41	100.00	141
TOTAL				3,822
Avg. cost per acre		\$2,710		

## INDEPENDENT 5

1.2 acre STATE LANDS BOND

Structural Removal

HRS&gt;acre \$/HR&gt;acr \$

30 ton crane, oper. & oiler	4	148.24	593
4 laborers	16	111.44	1,783

Earthwork & Grading

front end loader & operator	4	73.10	292
motor grader & operator	4	85.44	342
dump truck & operator	4	75.61	302
D-6 dozer & operator	5	107.80	539

Capping

concrete (in CY)	4	63.00	252
one laborer	4	27.86	111
forms, etc. (SUM)	1	50.00	50

Revegetation

tractor + disc/drill + operator	>	1.2	160.00	192
seed @ \$140/acre	>	1.2	140.00	168
fertilizer @ 200 lb/acre	>	1.2	100.00	120
TOTAL				4,745
Avg. cost per acre		\$3,954		

## LITTLE BONANZA 1

2.11 acre

RECLAIMED/OMITTED

## LITTLE BONANZA 3

1.14 acre STATE LANDS BOND

Structural Removal

HRS&gt;acre \$/HR&gt;acr \$

30 ton crane, oper. & oiler	4	148.24	593
4 laborers	16	111.44	1,783

Earthwork & Grading

front end loader & operator	3	73.10	219
motor grader & operator	3	85.44	256
dump truck & operator	3	75.61	227
D-6 dozer & operator	3	107.80	323

Capping

concrete (in CY)	4	63.00	252
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3/7

one laborer	4	27.86	111
forms, etc. (SUM)	1	50.00	50
<u>Revegetation</u>			
tractor + disc/drill + operator	> 1.14	160.00	182
seed @ \$140/acre	> 1.14	140.00	160
fertilizer @ 200 lb/acre	> 1.14	100.00	114
TOTAL			4,271
Avg. cost per acre	\$3,747		

LITTLE BONANZA 8	1.00 acre	ASSUMED ACREAGE & VALUES	
<u>Structural Removal</u>	HRS>acre	\$/HR>acr	\$
30 ton crane, oper. & oiler	4	148.24	593
4 laborers	16	111.44	1,783
<u>Earthwork &amp; Grading</u>			
front end loader & operator	3	73.10	219
motor grader & operator	3	85.44	256
dump truck & operator	3	75.61	227
<u>Capping</u>			
concrete (in CY)	4	63.00	252
one laborer	4	27.86	111
forms, etc. (SUM)	1	50.00	50
<u>Revegetation</u>			
tractor + disc/drill + operator	> 1	160.00	160
seed @ \$140/acre	> 1	140.00	140
fertilizer @ 200 lb/acre	> 1	100.00	100
TOTAL			3,892
Avg. cost per acre	\$3,892		

LITTLE BONANZA 11	1.01 acre		
<u>Structural Removal</u>	HRS>acre	\$/HR>acr	\$
30 ton crane, oper. & oiler	4	148.24	593
4 laborers	16	111.44	1,783
<u>Earthwork &amp; Grading</u>			
front end loader & operator	2	73.10	146
motor grader & operator	2	85.44	171
dump truck & operator	2	75.61	151
D-6 dozer & operator	1	107.80	108
<u>Capping</u>			
concrete (in CY)	4	63.00	252
one laborer	4	27.86	111

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forms, etc. (SUM)	1	50.00	50
<u>Revegetation</u>			
tractor + disc/drill + operator	>	1.01	160.00
seed @ \$140/acre	>	1.01	140.00
fertilizer @ 200 lb/acre	>	1.01	100.00
TOTAL			3,770
Avg. cost per acre		\$3,732	

LITTLE BONANZA 12	1.51	acre	
<u>Structural Removal</u>			
	HRS>acre	\$/HR>acr	\$
30 ton crane, oper. & oiler	4	148.24	593
4 laborers	16	111.44	1,783
<u>Earthwork &amp; Grading</u>			
front end loader & operator	3	73.10	219
motor grader & operator	3	85.44	256
dump truck & operator	3	75.61	227
D-6 dozer & operator	2	107.80	216
<u>Capping</u>			
concrete (in CY)	4	63.00	252
one laborer	4	27.86	111
forms, etc. (SUM)	1	50.00	50
<u>Revegetation</u>			
tractor + disc/drill + operator	>	1.51	160.00
seed @ \$140/acre	>	1.51	140.00
fertilizer @ 200 lb/acre	>	1.51	100.00
TOTAL			4,311
Avg. cost per acre		\$2,855	

LITTLE EMMA (1?)	1.10	acre	
<u>Structural Removal</u>			
	HRS>acre	\$/HR>acr	\$
30 ton crane, oper. & oiler	4	148.24	593
4 laborers	16	111.44	1,783
<u>Earthwork &amp; Grading</u>			
front end loader & operator	4	73.10	292
motor grader & operator	4	85.44	342
dump truck & operator	4	75.61	302
D-6 dozer & operator	4	107.80	431
<u>Capping</u>			
concrete (in CY)	4	63.00	252
one laborer	4	27.86	111

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forms, etc. (SUM)		1	50.00	50
<u>Revegetation</u>				
tractor + disc/drill + operator	>	1.10	160.00	176
seed @ \$140/acre	>	1.10	140.00	154
fertilizer @ 200 lb/acre	>	1.10	100.00	110
TOTAL				4,597
Avg. cost per acre		\$4,179		

COTTONWOOD 1 & 2 (?)		1.24	acre	STATE LANDS BOND
<u>Structural Removal</u>		HRS>acre	\$/HR>acr	\$
30 ton crane, oper. & oiler		4	148.24	593
4 laborers		16	111.44	1,783
<u>Earthwork &amp; Grading</u>				
front end loader & operator		2	73.10	146
motor grader & operator		2	85.44	171
dump truck & operator		2	75.61	151
<u>Capping</u>				
concrete (in CY)		4	63.00	252
one laborer		4	27.86	111
forms, etc. (SUM)		1	50.00	50
<u>Revegetation</u>				
tractor + disc/drill + operator	>	1.24	160.00	198
seed @ \$140/acre	>	1.24	140.00	174
fertilizer @ 200 lb/acre	>	1.24	100.00	124
TOTAL				3,754
Avg. cost per acre		\$3,027		

COTTONWOOD 3	ASSUMED	1.50	acre	STATE LANDS BOND
<u>Structural Removal</u>		HRS>acre	\$/HR>acr	\$
30 ton crane, oper. & oiler		4	148.24	593
4 laborers		16	111.44	1,783
<u>Earthwork &amp; Grading</u>				
front end loader & operator		3	73.10	219
motor grader & operator		3	85.44	256
dump truck & operator		3	75.61	227
D-6 dozer & operator		2	107.80	216
<u>Capping</u>				
concrete (in CY)		4	63.00	252
one laborer		4	27.86	111
forms, etc. (SUM)		1	50.00	50

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Revegetation

tractor + disc/drill + operator	>	1.5	160.00	240
seed @ \$140/acre	>	1.5	140.00	210
fertilizer @ 200 lb/acre	>	1.5	100.00	150
TOTAL				4,307
Avg. cost per acre		\$2,872		

## LITTLE BONANZA 8A

1.00 acre STATE LANDS BOND

Structural Removal

HRS&gt;acre \$/HR&gt;acr \$

30 ton crane, oper. & oiler	4	148.24	593
4 laborers	16	111.44	1,783

Earthwork & Grading

front end loader & operator	2	73.10	146
motor grader & operator	2	85.44	171
dump truck & operator	2	75.61	151
D-6 dozer & operator	1	107.80	108

Capping

concrete (in CY)	4	63.00	252
one laborer	4	27.86	111
forms, etc. (SUM)	1	50.00	50

Revegetation

tractor + disc/drill + operator	>	1	160.00	160
seed @ \$140/acre	>	1	140.00	140
fertilizer @ 200 lb/acre	>	1	100.00	100
TOTAL				3,766
Avg. cost per acre		\$3,766		

## PROCESSING FACILITIES

12.00 acre

Structural Removal

HRS&gt;acre \$/HR&gt;acr \$

30 ton crane, oper. & oiler	24	148.24	3,558
4 laborers	40	111.44	4,458
front end loader & operator	40	73.10	2,924
tractor trailer & operator	40	75.61	3,024

Earthwork & Grading

front end loader & operator	80	73.10	5,848
motor grader & operator	80	85.44	6,835
dump truck & operator	80	75.61	6,049
D-6 dozer & operator	44	107.80	4,743
backhoe & operator	20	65.54	1,311

Revegetation

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tractor + disc/drill + operator	>	12	160.00	1,920
seed @ \$140/acre	>	12	140.00	1,680
fertilizer @ 200 lb/acre	>	12	100.00	1,200
TOTAL				43,550
Avg. cost per acre		\$3,629		

<u>Project Supervision</u>	340	34.26	11,648
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<u>Mobilization</u>	6	1,000	6,000
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<u>RECLAMATION SUMMARY</u>		SL BOND	\$	ACRES
Independent 3			3,810	1.38
Independent 4			3,822	1.41
Independent 5	SL BOND \$5,000	4,745	0	1.20
Little Bonanza 3			4,271	1.14
Little Bonanza 8			3,892	1.00
Little Bonanza 11			3,770	1.01
Little Bonanza 12			4,311	1.51
Little Emma 1			4,597	1.10
Cottonwood 1 & 2	SL BOND \$5,000	3,754	0	1.24
Cottonwood 3	SL BOND \$7,500	4,307	0	1.50
Little Bonanza 8A	SL BOND \$5,000	3,766	0	1.00
Processing facilities			43,550	12.00
Project supervision			11,648	NA
Mobilization			6,000	NA
subtotal			89,671	
Add 10% contingency			8,967	
subtotal			98,638	
Add 5 yrs escalation @ 1.27%			6,425	
TOTAL			105,063	

ROUNDED TOTAL IN 1997 - \$ **\$105,000**

total acreage = 25.49

overall avg. cost per acre = \$4,119

**DRAFT**